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State of Utah

Department of Environmental Quality

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February 22, 2007

CERTIFIED MAIL
(Return Receipt Requested)

Gary Gray, Engineer
UtahAmercian Energy, Inc.
P.O. Box 1077
Price, Utah 84501

Dear Mr. Gray:

Subject: WET Testing Reduction Request Evaluation for UPDES Permit No. UT0024368 – Crandall Canyon Mine Facility.

We received your letter dated November 30, 2006 and subsequent additional information provided under separate cover dated February 6, 2007 regarding your request for a reduction of the whole effluent toxicity (WET) testing requirements for the above referenced UPDES permit. In your submittals, a request was made to reduce the frequency of WET testing from the existing quarterly monitoring requirement, as specified in Part I.D.5 of UPDES Permit No. UT0024368 (Permit), to an annual monitoring event for both WET testing species.

Your request for a WET testing reduction has been evaluated and pursuant to Part I.D.5 of the Permit, a determination has been made by the Executive Secretary that the Crandall Canyon Mine facility has adequately demonstrated the appropriateness for a reduction in the WET testing frequency requirements. However, the reduction in frequency shall be from the existing quarterly monitoring requirement to a semi-annual (twice per calendar year) monitoring requirement for both WET testing species.

Therefore, effective on the date of this letter and modified Permit, the WET testing requirements in Part I.D.5 of UPDES Permit No. UT0024368 for the Crandall Canyon Mine facility have been modified to reflect this change and you may immediately implement the semi-annual WET monitoring requirements. The applicable pages of your Permit have been modified to reflect this change and are included as an attachment herein.

Therefore, please replace the applicable pages in your UPDES permit with the attached revised pages. All other conditions, requirements, and limitations of UPDES Permit No. UT0024368 remain unchanged and are in full force and effect.

The Division of Water Quality appreciates your continued willingness and cooperation regarding compliance with the provisions of your UPDES permit. If you have any questions with regard to this matter, please contact Jeff Studenka of this office at (801) 538-6779 or via e-mail at jstudenka@utah.gov.

Sincerely,

Utah Water Quality Board

Walter L. Baker, P.E.
Executive Secretary

WLB:JS:mc

Enclosures

cc (w/ encl): Qian Zhang, P.E., EPA Region 8
Claron Bjork, SE Utah District Health Department
Dave Ariotti, District Engineer
Pam Grubaugh-Littig, Division of Oil Gas & Mines
Dave Shaver, UtahAmerican Energy, Inc.

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Permit No. UT000024368
Minor Industrial Modification

STATE OF UTAH
DIVISION OF WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALT LAKE CITY, UTAH
AUTHORIZATION TO DISCHARGE UNDER THE
UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM
(UPDES)

In compliance with provisions of the Utah *Water Quality Act, Title 19, Chapter 5, Utah Code Annotated (UCA) 1953, as amended* (the *"Act"*),

GENWAL RESOURCES, INC.

is hereby authorized to discharge from its facility located in Crandall Canyon, approximately 1 ½ miles northwest of Huntington, Utah, with outfalls located as indicated in the permit, to receiving waters named

CRANDALL CREEK (TRIBUTARY OF THE COLORADO RIVER)

in accordance with discharge point, effluent limitations, monitoring requirements and other conditions set forth herein.

This modified permit shall become effective on February 22, 2007.

This modified permit and the authorization to discharge shall expire at midnight, November 30, 2010.

Signed this 22nd day of February 2007.

Walter L. Baker, P.E.
Executive Secretary
Utah Water Quality Board

Effluent Characteristics	Effluent Limitations[1] *(continued)*				Monitoring Requirements	
	30 Day Average	7 Day Average	Daily Minimum	Daily Maximum	Sample Frequency	Sample Type
Dissolved Oxygen, mg/L *d/*	≥ 4.0	NA	NA	NA	Monthly	Grab
Sanitary Waste *e/*	NA	NA	NA	None	Monthly	Visual
Whole Effluent Toxicity, Chronic (outfall 002)	NA	NA	NA	Pass, IC_{25} = 66% effluent	Semi-annual	Composite

[1] *See Part I. A., "Definitions", for definition of terms.*
[2] *MGD: million gallons per day*
[3] *NA – Not Applicable*
[4] *mg/L: milligrams per liter*

a/ In addition to monthly sampling for oil and grease, a visual inspection for oil and grease, floating solids, and visible foam shall be performed at least twice per month at 001 and 002. There shall be no sheen, floating solids, or visible foam in other than trace amounts. If a sheen is observed, a sample of that effluent shall be collected immediately thereafter and oil and grease shall not exceed 10 mg/L in concentration.

b/ *Interim limits for TDS shall be effective from the effective date of this permit until February 28, 2006. The final TDS limits will be enforceable beginning March 1, 2006 or sooner if the permittee can make it so.* The interim TDS concentration from each of the outfalls shall not exceed 1200 mg/L as a daily maximum limit. Because the permittee is not likely to meet the final 500 mg/L 30-day average and will not meet the 1 ton per day loading limit, the permittee is required to complete an intercepted groundwater survey and/or participate in and/or fund a salinity-offset project, to include TDS offset credits, by February 28, 2006.

The salinity-offset project shall include TDS credits on a ton-for-ton basis for which the permittee is over the 1 ton per day loading limit. The tonnage reduction from the offset project must be calculated by a method similar to one used by the Natural Resources Conservation Service, Colorado River Basin Salinity Control Forum, or other applicable agency.

If the permittee will be participating in the construction and implementation of a salinity-offset project, then a project description and implementation schedule shall be submitted to the Executive Secretary within 6 months of the determination by the Executive Secretary, which will then be reviewed for approval. The salinity offset project description and implementation schedule must be approved by the Executive Secretary and shall be appended to this permit.

If the permittee is funding a salinity-offset project through third parties, the permittee shall provide satisfactory evidence to the Executive Secretary that the required funds have been deposited to the third party within 6 months of the determination by the Executive Secretary. A monitoring and adjustment plan to track the TDS credits shall also be submitted to the Executive Secretary within 6 months of the aforementioned determination, which will then be reviewed for approval. The monitoring and adjustment plan must be approved by the Executive Secretary and shall be appended to this permit.

c/ The pH shall not be less than 6.5 SU nor greater than 9.0 SU in any sample and shall be monitored monthly by instantaneous grab sample.

d/ The 30-day average DO shall not be less than 4.0 mg/L and shall be monitored monthly by an instantaneous grab sample.

e/ There shall be no discharge of sanitary waste.

2. Samples collected in compliance with the monitoring requirements specified above shall be collected at outfalls 001 and 002 prior to mixing with the receiving water.

3. Should any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period that is less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) may, at outfall 001, substitute the following limitations for the TSS and pH limitations contained in *Part I.D.1*:

Effluent Characteristics	Daily Minimum	Daily Maximum
Settleable solids (SS), milliliter/liter	NA	0.5
pH, SU	6.0	9.0

In order to substitute the above limitations, the sample collected during the storm event must be analyzed for all permitted parameters specified under *Part I.D.1.* (excepting TSS). Such analyses shall be conducted on either grab or composite samples.

Should any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period that is greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) may, at outfall 001, comply with the following pH limitation instead of the limitation contained in *Part I.D.1*:

Effluent Characteristics	Daily Minimum	Daily Maximum
pH, SU	6.0	9.0

In order to substitute the above limitation, the sample collected during the storm event must be analyzed for all permitted parameters specified under *Part I.D.1*. Such analyses shall be conducted on either grab or composite samples.

4. The operator shall have the burden of proof that the increase in discharge was caused by the applicable precipitation event described in *Part I.D.3*. The alternate limitation in *Part I.D.3* shall not apply to treatment systems that treat exclusively underground mine water (i.e. outfall 002).

5. Whole Effluent Testing - Chronic Toxicity. Starting on the effective date of the modified permit, the permittee shall semi-annually conduct chronic short-term toxicity tests on a composite sample of the final effluent. The sample shall be collected at outfall 002.

The monitoring frequency shall be semi-annually (twice per calendar year; once from January 1st to June 30th and once from July 1st to December 31st). Samples shall be collected on a two-day progression; i.e., if the first sample is on a Monday, during the next sampling period, sampling shall be on a Wednesday. If chronic toxicity is detected, the test shall be repeated in less than four weeks from the date the initial sample was taken. The need for any additional samples, and/or a Toxicity Reduction Evaluation (TRE) (*see Part I.D.5.*) shall be determined by the Executive Secretary. If the second test shows no chronic toxicity, routine monitoring shall be resumed.

The chronic toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013* as per *40 CFR 136.3(a) TABLE IA-LIST OF APPROVED BIOLOGICAL METHODS, and the Region VIII EPA NPDES Chronic Test Conditions - Static Renewal Whole Effluent Toxicity Test (August 1997)*. In case of conflicts, the Region VIII procedure will prevail. Tests will be conducted semi-annually using both Ceriodaphnia dubia and Pimephales promelas (fathead minnow) species. A CO_2 atmosphere may be used (in conjunction with an unmodified test) in order to account for pH drift.

Chronic toxicity occurs when the IC_{25} is less than or equal to an effluent concentration of 66%. If any of the acceptable control performance criteria are not met, the test shall be considered invalid.

Semi-annual test results shall be reported along with the Discharge Monitoring Report Form (DMR) submitted for the end of the reporting calendar half-year. For example, biomonitoring results for the calendar half-year ending June 30th shall be reported with the standard DMR due July 28th, with the remaining biomonitoring semi-annual report submitted with standard DMR due January 28th. Biomonitoring results shall be reported on a biomonitoring DMR form, shall be consistent with the latest revision of the *Region VIII NPDES Whole Effluent Toxics Control Program, August 1997, Appendix C: Region VIII Guidance for Chronic Whole Effluent Toxicity Reporting*, and shall include all chemical and physical data as specified.

If the results for the remainder of this modified permit testing indicate no chronic toxicity, the permittee may request a reduction in testing frequency and/or reduction to one species. The Executive Secretary may approve, partially approve, or deny the request based on results and other available information. If approval is given, the modification may take place without a public notice.

The current Utah whole effluent toxicity (WET) policy is in the process of being updated and revised to assure its consistency with the Environmental Protection Agency's national and regional WET policy. When the revised WET policy has been finalized and officially adopted, this permit may be reopened and modified to incorporate satisfactory follow-up chronic toxicity language (chronic pattern of toxicity, preliminary toxicity investigation, and/or toxicity identification evaluation (TIE)/TRE, etc.) without a public notice, as warranted and appropriate.

6. Toxicity Reduction Evaluation. If toxicity is detected during the life of this permit and it is determined by the Executive Secretary that a TRE is necessary, the permittee shall be so notified and shall initiate a TRE immediately thereafter. The purpose of the TRE will be to establish the cause of the toxicity, locate the source(s) of the toxicity, and control or provide treatment for the toxicity.

A TRE may include but is not limited to one, all, or a combination of the following:

a. Phase I - Toxicity Characterization

b. Phase II - Toxicity Identification Procedures

c. Phase III - Toxicity Control Procedures

d. Any other appropriate procedures for toxicity source elimination and control

If the TRE establishes that the toxicity cannot be eliminated immediately, the permittee shall submit a proposed compliance plan to the Executive Secretary. The plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control. If the approach and schedule are acceptable to the Executive Secretary, this permit may be reopened and modified.

If the TRE shows that the toxicity is caused by a toxicant(s) that may be controlled with specific numerical limitations, the permittee may:

a. Submit an alternative control program for compliance with the numerical requirements.

b. If necessary, provide a modified biomonitoring protocol that compensates for the pollutant(s) being controlled numerically.

If acceptable to the Executive Secretary, this permit may be reopened and modified to incorporate any additional numerical limitations, a modified compliance schedule if judged necessary by the Executive Secretary, and/or a modified biomonitoring protocol.

Failure to conduct an adequate TRE, or failure to submit a plan or program as described above, or the submittal of a plan or program judged inadequate by the Executive Secretary, shall be considered a violation of this permit.